

**GB 28050-2011 Standard for Nutrition Labeling of Prepackaged Foods**

 **National Standards of People's Republic of China**

**GB 28050-2011**

**National Food Safety Standard**  
**Standard for Nutrition Labeling of Prepackaged Foods**

Issued on: 2011-10-12

Implemented on: 2013-01-01

**Issued by National Health and Family Planning Commission**

## National Standard for Food Safety

### Standard for Nutrition Labeling of Prepackaged Foods

#### 1. Scope

This standard applies to the description and presentation of nutrition information on nutrition labeling of a prepackaged food.

This standard does not apply for the nutrition labeling for health food nor pre-packaged food for special dietary uses.

#### 2. Terms and Definitions

##### Nutrition labeling

Nutrition labeling is a description intended to inform the consumer of the nutritional information and the nutritional properties of a food, which includes nutrition components table, nutrition claims and nutrient function claims. Nutrition labeling is a part of food labeling.

##### a) Nutrients

Substances in food with specific physiological role to maintain the body's growth, development, activities, reproduction, and normal metabolism, which include protein, fat, carbohydrates, minerals and vitamin, etc.

##### b) Nutritional component

Nutritional component refers to nutrients or other component in food in addition to nutrients which have nutritional properties of a food, which includes nutrition components table, nutrition claims and nutrient function claims. Nutrition labeling is a part of food labeling.

##### c) Core Nutrient

Core nutrients in nutrition labelling include protein, fat, carbohydrates, and sodium, etc.

##### d) Nutritional Components table

A normative form with the name of nutrient component, the content of nutrient component and % NRV (Nutrient reference value).

##### e) Nutrient reference value (NRV)

Nutrient Reference Value (NRV) is a reference value especially for food nutrition labelling purpose, and to compare the content levels of nutrient components.

##### f) Nutrition claim

Nutrition claim refers to a description and declaration of the nutritional properties of a food, such as declaration of energy value and content claim of protein. Nutrition claim includes content claim and comparative claim.

i. Content claim

Content claim means a claim that describes the energy or the nutrient content level in a food. The diction for nutrient content claim includes "contains", "high", "low" or "no", etc.

ii. Comparative claim

Comparative claim means a claim that compares the energy value or the content level of a nutrient in a food with other foods of same type known by consumers. The diction includes "add", "reduce", etc.

g) Nutrient function claim

A claim that describes the role of a nutrient component in normal growth, development and normal physiological function of the body.

h) Rounding interval

Rounding interval is the minimum unit value of a rounded numerical value.

i) Edible parts

Edible parts of a food refer to the remaining parts that can be consumed after the removal of those non-edible parts of the net content of the prepackaged food.

### 3. General requirements

a) Any nutrition information presented on a nutrition label of a food should be truthful, subjective and not be in any deceptive, not to exaggerate the nutritional or other functions.

b) Nutrition label of the prepackaged food should be written in Chinese. If a foreign language is also adopted, its content should be in correspondence with which in Chinese. The foreign letters shall not larger than the corresponding Chinese characters.

c) The nutrition components of a food should be indicated in form of box table (except in exceptional circumstances) which can be any size and should be perpendicular to the baseline of the packaging. The title of the table should be Nutrition Components Table.

d) The content of a nutrition component in food should be indicated in a special value which may be obtained by calculation using that of raw materials or by product detection. The nutrient reference values (NRV) of the nutrient components are established in the Annex A.

e) The nutrition label formats are specified in the Annex B. The food companies can choose one of them according to the elements such as nutrition property, packaging dimension and shape, etc.

f) The nutrition label should be indicated in the packaging of the minimum sales unit offered to the consumers.

#### 4. Mandatory labeling items

- a) Energy, core nutrients content value and percentage in the nutrient reference values (NRV) are mandatory labeling items on a nutrition label of prepackaging foods. When there are other nutritional components to be claimed, appropriate measures shall be taken to highlight the claims of energy and core nutrients.
- b) When other nutrient components besides energy and core nutrients should be made nutrition claim or nutrient function claim. In the Nutrient Components Table, this nutrient component content and the nutrient reference values (NRV) in which represents should be claimed.
- c) The prepackaged food in which the food nutrition enhancer has been used, in addition to the requirement of the 4.1, in the Nutrient Components Table, this nutrient component content and the nutrient reference values (NRV) in which represents after enhancement should be claimed.
- d) If the food ingredients content hydrogenated and/or partially hydrogenated fats and oils, or they have been used in the production, in the Nutrient Components Table, the content of Trans fat (acid) should be claimed.
- e) The nutrient components whose nutrient reference values (NRV) are not established in the above points only need to claim the content.

#### 5. Optional labeling content

- a) In addition to the above mandatory label content, in the Nutrient Components Table, the other components in the Table 1 could be claimed optional.
- b) When the claimed value of one nutrient component meets the content requirement and the restrictive conditions in the Table C.1, the content claim of this component could be made and the claim form is showed in the Table C.1. When the content of one nutrient component meets the requirements and conditions in the Table C.3, the comparative claim of this component could be made and the claim form is showed in the Table C.3. When one nutrient component meets the requirements of content claim and comparative claim, the two claim forms could be used at the same time, or only use the content claim. The synonymous of the content claim and the comparative claim are in the Table C.2 and Table C.4.
- c) When the claimed value of one nutrient component meets the requirements and conditions of content claim or comparative claim, one or various standard expressions of function claim of the nutrient component in the Annex D could be used. No excision, adjunction and merger in any form to the expressions of function claim should be made.

#### 6. Nutrient components expression

- a) The content level of energy and nutrient components in prepackaged food shall be expressed in “amount per 100g” and (or) “amount per 100mL” and (or) “Specified numerical values of the edible part per serving”. The quantity of per serving should be indicated if “Per serving” expression is adopted and the size of per serving can be defined in according to the features of the food.
- b) The name, regular succession, claim unit, rounding interval, definition of “0” of the nutrient component which need mandatory claim and optional claim in the Nutrient Components Table should be in compliance with the provisions listed in Table 1. When a nutrient component is not claimed, the other items move up in order to the sequence.

c) In addition to the Table 1, when the other nutrient components permitted to be enhanced according to the GB 14880 and the announcements of the Ministry of Health are claimed, they should be listed after the other nutrients in the Table 1.

**Table 1: Name, Sequence, Expression units, Rounding interval and Definition of “0” for Energy and Nutritional Components**

Name and order of energy/nutritional components	Labeled unit <sup>a</sup>	Rounding interval	Limit value of “0” (Per 100 g or 100ml) <sup>b</sup>
Energy	kJ	1	≤17 kJ
Protein	g	0.1	≤ 0.5 g
Fat	g	0.1	≤ 0.5 g
Saturated fat (fatty acid)	g	0.1	≤ 0.1 g
Trans fat (fatty acid)	g	0.1	≤ 0.3 g
Monounsaturated fat (fatty acid)	g	0.1	≤ 0.1 g
Polyunsaturated fat (fatty acid)	g	0.1	≤ 0.1 g
Cholesterol	mg	1	≤ 5 mg
Carbohydrate	g	0.1	≤ 0.5 g
Sugar (Lactose c)	g	0.1	≤ 0.5 g
Dietary fiber (or monomer of fiber or soluble dietary fiber or insoluble dietary fiber)	g	0.1	≤ 0.5 g
Sodium	mg	1	≤ 5 mg
Vitamin A	μgRE	1	≤ 8μgRE
Vitamin D	Mg	0.1	≤0.1μg
Vitamin E	mg α-TE	0.01	≤0.28mgα-TE
Vitamin K	μg	0.1	≤1.6μg
Vitamin B1	mg	0.01	≤0.03mg
Vitamin B2	mg	0.01	≤0.03mg
Vitamin B6	mg	0.01	≤0.03mg
Vitamin B12	μg	0.01	≤0.05μg
Vitamin C	mg	0.1	≤2.0mg
Nicotinic acid	mg	0.01	≤0.28mg
Folacin/Folic acid	μg or μg DFE	1	≤8μg
Pantothenic acid	mg	0.01	≤0.10mg
Biotin	μg	0.1	≤0.6μg
Choline	mg	0.1	≤9.0mg
Phosphorus	mg	1	≤14mg
Potassium	mg	1	≤20mg
Magnesium	mg	1	≤6mg
Calcium	mg	1	≤8mg
Iron	mg	0.1	≤0.3mg
Zinc	mg	0.01	≤0.30mg
Iodine	μg	0.1	≤3.0μg
Selenium	μg	0.1	≤1.0μg
Copper	mg	0.01	≤0.03mg
Fluorine	mg	0.01	≤0.02mg
Manganese	mg	0.01	≤0.06mg

a Labeled units can be in Chinese or English, or both.

b Define it “0”when content of a certain nutritional component is less than or equals to the limit value of “0”.The regulations on the limit value of “0” (per 100g or per 100ml) shall also be met when “per serving” expression is adopted.

c It can be directly indicated as “lactose” on a nutrition label of milk or milk product.

d) In the whole shelf life, the error range for content of energy and nutritional components shall be judged in according to the provisions listed in Table 2.

**Table 2: Allowed error range for content of energy and nutritional components**

Nutrients in foods	Allowed error range
Protein, Polyunsaturated fat (fatty acid), Monounsaturated fat (fatty acid), Carbohydrates, Sugars (only lactose), Total dietary fiber (soluble fibre, insoluble fibre), individual component of fibre Vitamins (other than Vitamin D, Vitamin A), Minerals (exclude Sodium), other nutrients enhanced in food	≥80% declared value
Energy, Fat, Saturated fat (fatty acid), Trans fat (fatty acids), Cholesterol, Sodium, Sugars (exclude lactose) in food	≤120% declared value
Vitamin D and Vitamin A in food	80% ~ 180% declared value

## 7. Prepackaged food exempted for the mandatory nutrient label

Prepackaged foods of following types are exempt from rules on nutrition labeling:

- Fresh food, such as packed raw meat, raw fish, raw vegetables and fruits, fresh eggs, etc;
- Alcohol beverages with greater than or equal to 0.5% of alcohol content;
- Packaged food with total surface area of no more than 100 cm<sup>2</sup> or the largest surfaces area of the package is no more than 20 cm<sup>2</sup>;
- Food sold on the site which is usual y bought for immediate consumption;
- Bottled drinking water;
- A prepackaged food that the daily intake amount shall be no more than 10g or 10ml.
- Those prepackaged foods which falling with the criteria of exemptions of food labels according to the laws, regulations and standards.

The exemption will be removed if a nutrition claim is made on prepackaged food listed above. And the nutrition labeling of this product should meet the requirements specified in this standard

## Appendix A

### Chinese Nutrient Reference Value (NRV) and Methods of Use

#### 1. A.1 Nutrient reference value (NRV)

NRVs for energy and 32 types of specified nutrients are listed in Table A.1.

**Table A.1. Nutrient Reference Value (NRV)**

Nutrient Components	NRV	Nutrient component	NRV
Energy <sup>a</sup>	8400 kJ	Folic acid	400 µg DFE
Protein	60 g	Pantothenic acid	5 mg
Fat	≤60 g	biotin	30 µg
Saturated fatty acids	≤20 g	Choline	450 mg
Cholesterol	≤300 mg	Calcium	800 mg
Carbohydrate	300 g	Phosphorus	700 mg
Dietary fibre	25 g	Potassium	2000 mg
Vitamin A	800 µg RE	Sodium	2000 mg
Vitamin D	5 µg	Magnesium	300 mg
Vitamin E	14mg □TE	Iron	15 mg
Vitamin K	80 µg	Zinc	15mg
Vitamin B1	1. 4 mg	Iodine	150 µg
Vitamin B2	1. 4 mg	Selenium	50 µg
Vitamin B6	1. 4 mg	Copper	1.5 mg
Vitamin B12	2.4 µg	Fluorine	1 mg
Vitamin C	100 mg	Manganese	3 mg
Niacin	14 mg		

a 8400kJ of energy is equivalent to 2000 kcal of energy. The energy value contribution of the protein, fat and carbohydrate respectively is 13%, 27% and 60% of total energy.

#### 2. A.2 Using purpose and method

NRV is used to compare and describe energy level or the content level of nutrients. When nutrition claims and the definition of “0” are adopted for expression, NRV may be used as a standard reference value.

Express nutrient information in percentage of nutrient reference value (% NRV).

The appointed rounding interval for % NRV is 1, such as 1%, 5%, 16% , etc.

#### 3. A.3 Calculation

Calculate NRV% for a nutrient using equation below (A.1):

$$NVR \% = X / NVR \times 100\% \dots\dots\dots(A.1)$$

Where: X -- the content of a nutrient in food

NRV -- Nutrition reference value for this item

## Appendix B

### Format of nutrition label

B.1. This Appendix specifies the format of nutrition label of prepackaged food.

B.2. One of the following six formats of nutrition labels should be adopted.

#### B.2.1 Only labeling energy and core nutrients format

The nutrition label in which only the energy and core nutrients are claimed refers to the example 1.

Example 1:

**Nutrition information Table**

Item	Per 100g/100ml or per serving	Nutrient Reference Value % or NRV%
Energy	kJ	%
Protein	g	%
Fat	g	%
Carbohydrate	g	%
Sodium	mg	%

#### B.2.2 More nutrition composition

The nutrition label with more information refers to the example 2.

Example 2:

**Nutrition Information Table**

Item	Per 100g/100ml or per serving	Nutrient Reference Value % or NRV%
Energy	kJ	%
Protein	g	%
Fat	g	%
--Saturated fat	g	%
Cholesterol	mg	%
Carbohydrate	g	%
Sugar	g	%
Dietary fiber	g	%
Sodium	mg	%
Vitamin A	□g RE (retinol equivalent)	
Calcium	mg	

Note: the core nutrient should label in appropriate format to make it striking.



### B.2.3 Format with foreign language

The nutrition label with foreign language refers to the example 3.

Example 3:

#### Nutrition Information

Items	100 g or 100 ml per 100g/100ml or per serving	NRV%
Energy	kJ	%
Protein	g	%
Fats	g	%
Carbohydrate	g	%
Sodium	mg	%

### B.2.4 Horizontal format

The nutrition label in horizontal format refers to example 4.

Example 4:

#### Nutrition Information Table

Item	per 100g/100ml or per serving	Nutrient Reference Value % or NRV%	Item	per 100g/100ml or per serving	Nutrient Reference Value % or NRV%
Energy	kJ	%	Protein	g	%
Carbohydrate	g	%	Fat	g	%
Sodium	g	%	--	--	%

\* According to the packing characteristics, nutrients can be arranged horizontally from left to right, dividing into two rows or more.

### B.2.5 Characters format

For foods whose total area of package less than 100cm<sup>2</sup>, when labeling the nutrition information, the NRV can be omitted. Nutrients can be arranged horizontally from left to right, or vertically up to down according to the packing characteristics. For example:

Example 5:

Nutrition Information /100g: Energy XX kJ, Protein XX g, Fat XX g, Carbohydrate XX g, Sodium XX mg.

### B.2.6 Format with nutrition claim and/or nutrition function claim

Nutrition claim and/or nutrition function claim refers to example 6.

Example 6:

**Nutrition Information**

Item	per 100g/100ml or per serving	Nutrient Reference Value % or NRV%
Energy	kJ	%
Protein	g	%
Fat	g	%
Carbohydrate	g	%
Sodium	mg	%

Nutrition Claim. Such as: Low fat XX

Nutrition Function Claim. Such as: Energy from fat should not exceed 30% of total energy for daily diet.

Nutrition claim and/or nutrition function claim can be labeled on anywhere of the label, but the font size should not exceed the food name and the trademark.

## Appendix C

### Requirements, Conditions and Synonyms for Energy and Nutrient Content Claim and Comparison Claim

C.1 The Table C.1 provides for requirements and conditions for nutrient content claim and comparative claim of energy and nutritional components.

C.2 Table C.2 provides for synonyms for nutrient content claim of energy and nutritional components.

C.3 Table C.3 provides for requirements and conditions for nutrient comparative claim of energy and nutritional components.

C.4 Table C.4 provides for synonyms for nutrient comparative claim of energy and nutritional components.

**Table C.1 Requirements and conditions for nutrient content claim and comparative claim of energy and nutritional components**

Item	Content Claim Mode	Content demand <sup>a</sup>	Restriction
Energy	No energy	≤17 kJ/100g (solid) or 100ml (Liquid)	Energy from fat ≤50% of total energy
	Low energy	≤170 kJ/100g solid ≤80 kJ/100ml liquid	
Protein	Low protein	Energy from protein ≤ 5% of total energy	Total energy refers to per 100g/ml or per serving
	Origin of protein, or include protein	Content /100 g ≥10% NRV Content /100 ml ≥5% NRV or Content /420 kJ ≥5% NRV	
	High, or rich in protein	Content /100 g ≥20%NRV Content /100 ml ≥10%NRV or Content /420 kJ ≥10%NRV	
Fat	No fat or not including fat	≤0.5 g/100g (solid) or 100ml (liquid)	
	Low fat	≤3 g/100g solid; ≤1.5g/100ml liquid	
	Lean	Fat content ≤10%	Refer to livestock and poultry only
	Skim	Liquid milk and yoghurt: fat ≤0.5%, Milk powder: fat ≤1.5%	Refer to dairy products only.
	No or not including saturated fat	≤0.1 g/ 100g(solid) or 100ml (liquid)	Refer to sum of saturated fat and trans fat
	Low saturated fat	≤1.5 g/100g solid ≤0.75 g /100mL liquid	1. Refer to sum of saturated fat and trans fat 2. energy from saturated fat no more than 10% of total
	No or not including transfat	≤0.3 g/100g (solid) or 100ml (liquid)	
Cholesterol	No or not including cholesterol	≤5 mg/100g (solid) or 100ml (liquid)	Should comply with both demand and restriction for low saturated fat claim
	Low cholesterol	≤20m g /100g solid; ≤10m g /100ml liquid	

**Table C.1 (Continued)**

Item	Content Claim Mode	Content demand <sup>a</sup>	Restriction
Carbohydrate (Sugar)	Sugar free or sugar excluded	≤ 0.5 g /100g (solid) or 100ml (liquid)	
	Low sugar	≤ 5 g /100g (solid) or 100ml (liquid)	
	Low lactose	Lactose ≤ 2 g/100g (ml)	Refer to dairy products only
	No lactose	Lactose ≤ 0.5 g/100g (ml)	
Dietary fiber	Origin of dietary fiber or including dietary fiber	≥3 g/ 100g (solid) ≥1.5 g/ 100ml (liquid) or ≥1.5 g/ 420 k	Total content of dietary fiber should comply with the demand; or at least one of soluble dietary fiber, insoluble dietary fiber and monomer comply with the demand
	High or rich in dietary fiber or good origin	≥6 g/ 100g (solid) ≥3 g/ 100ml (liquid) or ≥3 g/ 420 kj	
Sodium	No sodium or not including sodium	≤5 mg /100g or 100ml	The “sodium” can be replaced by “salt”, such as “low salt”, “salt reduced”, etc
	Very low sodium	≤40 mg /100g or 100ml	
	Low sodium	≤120 mg /100g or 100ml	
Vitamin	Origin of vitamin X or including vitamin X	/100 g ≥15% NRV /100 ml ≥7.5% NRV or /420 kJ ≥5% NR	Including “multivitamins” refer to 3 or more vitamins, complying with the “including” demand
	High or rich in vitamin X	/100 g ≥ 30% NRV /100 ml ≥15% NRV or /420 kJ ≥ 10% NRV	Rich in “multivitamins” refer to 3 or more vitamins, complying with the “rich in” demand
Mineral	Origin of X or including X	/100 g ≥15% NRV /100 ml ≥7.5% NRV or /420 kJ ≥5% NRV	Including “multi-minerals” refer to 3 or more minerals, complying with the “including” demand
	High or rich in X	/100 g ≥ 30% NRV /100 ml ≥15% NRV or /420 kJ ≥ 10% NRV	Rich in “multi-minerals” refer to 3 or more minerals, complying with the “rich in” demand

a When use per serving as the measuring unit, it also should comply with per 100g(ml) demand.

**Table C.2 Synonymous name of content claim**

Standard	Synonymous	Standard	Synonymous
Not including, or no	Zero (0), without, 100 % not including, no, 0 %	Including, origin of	Provide, include, have
Very low	very few	Rich in, high	Good origin, with rich XX, rich in xx, provide high xx (content)
Low	less, less oil <sup>a</sup>		

a “less oil” refers to low fat claim only.

**Table C.3 Requirements and Conditions for energy and nutrition comparative claim**

Comparative Claim Form	Requirements	Conditions
Energy reduced	Compared with the reference food, energy value is reduced by 25% or more	The reference food should be of the same type or genus which is well known by the consumers and easy to be understood.
Protein enhanced or reduced	Compared with the reference food, protein content is enhanced or reduced by 25% or more	
Fat reduced	Compared with the reference food, fat content is reduced by 25% or more	
Cholesterol reduced	Compared with the reference food, cholesterol content is reduced by 25% or more	
Carbohydrate enhanced or reduced	Compared with the reference food, carbohydrate content is enhanced or reduced by 25% or more	
Sugar reduced	Compared with the reference food, sugar content is reduced by 25% or more	
Dietary fiber enhanced or reduced	Compared with the reference food, dietary fiber content is enhanced or reduced by 25% or more	
Sodium reduced	Compared with the reference food, sodium content is reduced by 25% or more	
Mineral (exclude sodium) enhanced or reduce	Compared with the reference food, mineral content is enhanced or reduced by 25% or more	
Vitamin enhanced or reduced	Compared with the reference food, vitamin content is enhanced or reduced by 25% or more	

**Table C.4 Synonymous of Comparison Claim**

Standard	Synonymous	Standard	Synonymous
Enhanced	Enhanced by X % (X times)	Reduced	Reduced by X % (X times)
	Enhanced, enhanced by X % (X times)		Reduced, reduced by X% (X times)
	Raised, raised by X % (X times)		Subtracted, subtracted by X % (X times)
	Heightened, X % (X times) higher		Lowered, X % (X times) lower
	Increased by X % (X times), etc.		Decreased by X % (X times), etc.
	X% more, X times increased		X% less, X times decreased

## Appendix D

### Standard Language of energy and nutrition function claim

**D.1** The present Appendix specifies the standard language of energy and nutrition function claim.

#### **D.2 Energy**

The human body needs energy to maintain life activities.

The body growth, development and all activities need energy.

Appropriate energy could maintain good health.

Over intake of energy and insufficient exercise are related with overweight and obesity.

#### **D.3 Protein**

Protein is the main component of body and could provide various kinds of amino acids.

Protein is essential to human life activities, as well as contributing to tissue formation and growth.

Proteins help constituting or repairing of human tissue.

Proteins contribute to tissue formation and growth.

Protein is an essential nutriment for tissue formation and growth.

#### **D.4 Fat**

Fat could provide high energy.

Energy from fat should not exceed 30% of total energy for daily diet.

Fat is an essential component for human body.

Fat could help the absorption of fat-soluble vitamins.

Fat could provide the essential fatty acid for human body.

##### **D.4.1 Saturated fat**

Saturated fat could facilitate the absorption of cholesterol in foods.

Excessive intake of saturated fat will do harm to health.

Excessive intake of saturated fat will cause increase of cholesterol, so the intake should be less than 10% of total energy every day.

##### **D.4.2 Trans fatty acids**

Intake of Trans fatty acid should be less than 2.2g everyday and the excessive intake will do harm to health.

Intake of Trans fatty acids should be less than 1% of total energy every day. Excessive intake will do harm to health.

Excessive intake of trans fatty acid will increase the cholesterol in blood, thereby increasing the risk of Cardiovascular disease

#### **D.5 Cholesterol**

For adults, the intake of cholesterol should not exceed 300mg for daily diet.

#### **D.6 Carbohydrate**

Carbohydrate is a basic compound for human life, also the main source of energy.

Carbohydrate is the main source of energy for human.

Carbohydrate is the main source for blood sugar formation.

Carbohydrate should take about 60% of total energy in diet.

#### **D.7 Dietary fiber**

Dietary fiber can help maintain natural function of intestines.

Dietary fiber is low energy.

#### **D.8 Sodium**

Sodium could adjust the water balance of body, hence the acid-base balance.

The daily intake of salt should not exceed 6g for adults.

Excessive intake of sodium will do harm to health.

#### **D.9 Vitamin A**

Vitamin A helps maintain the scotopia.

Vitamin A helps maintain the health of skin and mucosa.

#### **D.10 Vitamin D**

Vitamin D facilitates the absorption of calcium.

Vitamin D helps maintain the health of bone and tooth.

Vitamin D helps the formation of bone.

#### **D.11 Vitamin E**

Vitamin E has anti-oxidation effects.

**D.12 Vitamin B<sub>1</sub>**

Vitamin B<sub>1</sub> is an essential component for energy metabolism.

Vitamin B<sub>1</sub> helps maintain the natural physiological function of neural system.

**D.13 Vitamin B<sub>2</sub>**

Vitamin B<sub>2</sub> helps maintain the health of skin and mucosa.

Vitamin B<sub>2</sub> is an essential component for energy metabolism.

**D.14 Vitamin B<sub>6</sub>**

Vitamin B<sub>6</sub> helps the metabolism and use of protein.

**D.15 Vitamin B<sub>12</sub>**

Vitamin B<sub>12</sub> helps the formation of RBC.

**D.16 Vitamin C**

Vitamin C helps maintain the health of skin and mucosa.

Vitamin C helps maintain the health of bone and tooth.

Vitamin C could facilitate the absorption of iron.

Vitamin C has anti-oxidation effects.

**D.17 Niacin**

Niacin helps maintain the health of skin and mucosa.

Niacin is an essential component for energy metabolism.

Niacin helps maintain the health of neural system.

**D.18 Folic acid**

Folic acid helps the growth of brain and neural system for embryo.

Folic acid helps the formation of RBC.

Folic acid helps the growth of embryo.

**D.19 Pantothenic acid**

Pantothenic acid is essential for energy metabolism and tissue formation.

**D.20 Calcium**

Calcium is the main component for human bone and tooth, also participating many of the physiological function.



Calcium is the main component for bone and tooth, as well as maintaining bone density.

Calcium helps the growth of bone and tooth.

Calcium makes the bone and tooth more firm.

#### **D.21 Magnesium**

Magnesium is essential for energy metabolism, tissue formation and bone growth.

#### **D.22 Iron**

Iron is factor for RBC formation.

Iron is essential for RBC formation.

Iron is essential for production of hemoglobin.

#### **D.23 Zinc**

Zinc is essential element for children growth.

Zinc helps improve of appetite.

Zinc helps maintain the health of skin.

#### **D.24 Iodine**

Iodine is essential for natural function of hypothyroid.